

# THE COURSE OF MEDICINE IN SPACE AND IN TIME

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## AIM

The purpose of this work is to present the historical course of Medical Science in space. The goal is the historical data with its historical witnesses.

## MATERIAL

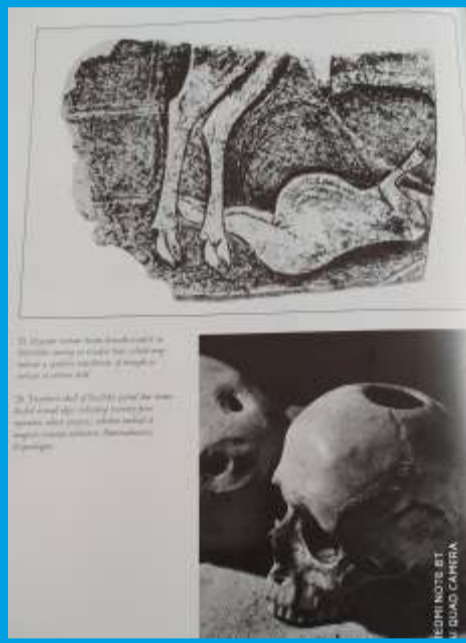
The material is textbooks of History of Medicine with their sources, medical article and ancient Greek Literature.

## METHOD

The method is the textual criticism of the accessible to us bibliography.

## RESULTS

On the results, first of all, medicine was developed in all over the world, initially as medicine of the instinct, as empiric, as religious, as magic and finally as scientific. This develop of Medicine followed a definite march.



The first witnesses are from the region of Mesopotamia with medical knowledge written in cuneiform writing at the end of the third millennium B.C. on wooden tablet, clay model, and soapstone, while the Hammurabi's code is written in 1700 B.C. but both presuppose a knowledge of third millennium.

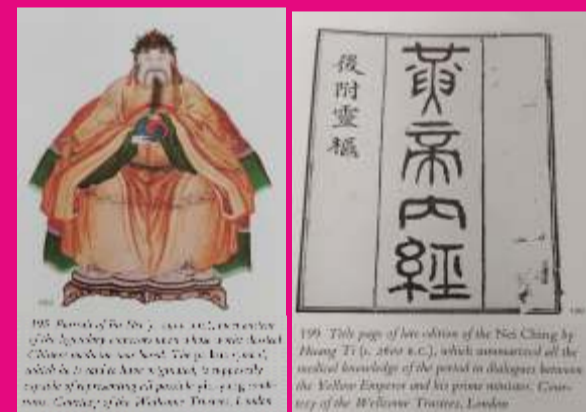
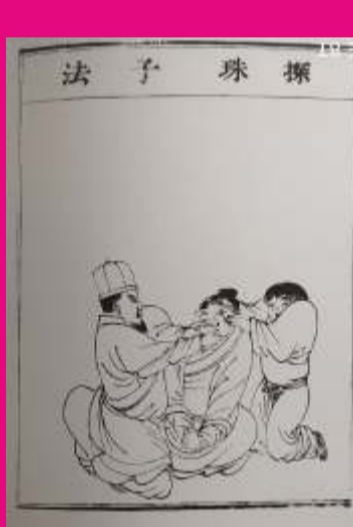


In India is well known the paved bathroom excavated in Mohenjo – Daro (c. 3300 B.C.) indicative, as it is said, of advanced systems of public sanitation. Muthu denotes in Rigveda, the eldest of bedas, considered from him c. in forth millennium B.C.; besides the religious references, were referred pharmaceutical plants too. The Atharvaveda, later veda, contains magic prescriptions and the latest, the Ayurveda, contains, besides magic medicine, references to pure medicine with another theory of humors.



In China, it refers the Red Emperor's (Hung Ti), Yu Hsiung, first medical herbal with 365 drugs and the first charts on acupuncture, in early second millennium (2600 B. C.), presumably even older, transmitted orally and edited later.

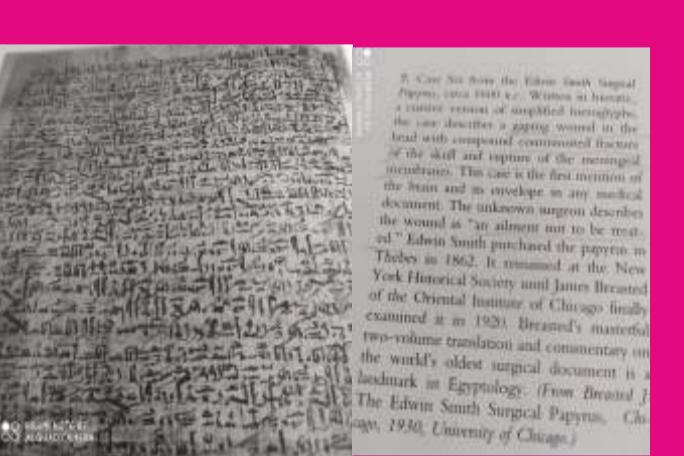
31. The ancient Chinese... The Red Emperor's (Hung Ti) medical herbal with 365 drugs and the first charts on acupuncture, in early second millennium (2600 B. C.), presumably even older, transmitted orally and edited later.



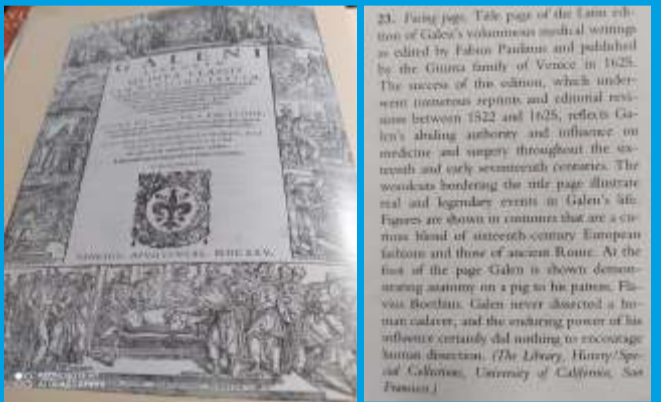
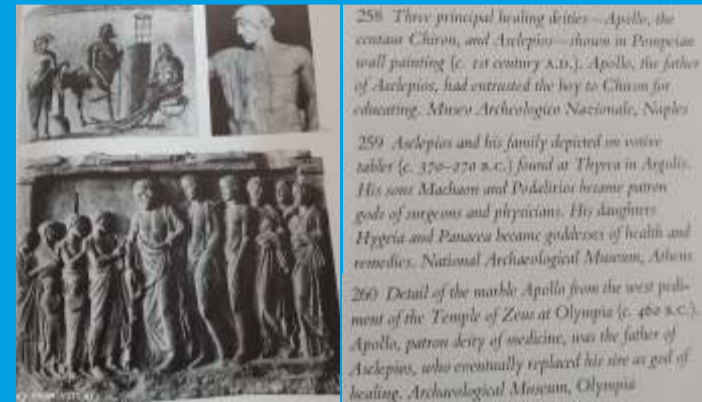
42. Traditional Chinese methods for the... The Red Emperor's (Hung Ti) medical herbal with 365 drugs and the first charts on acupuncture, in early second millennium (2600 B. C.), presumably even older, transmitted orally and edited later.



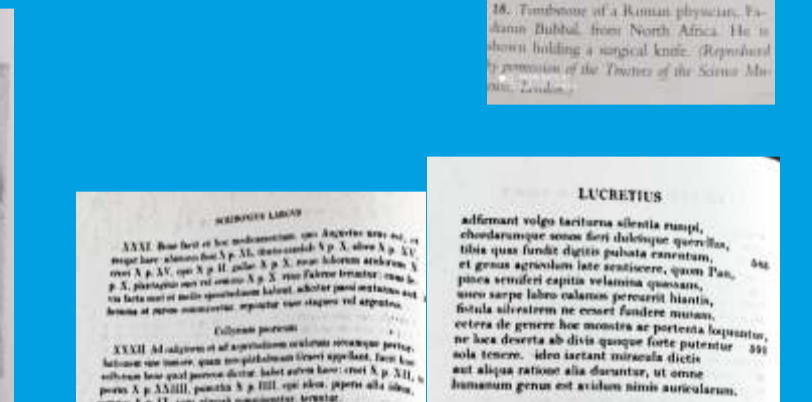
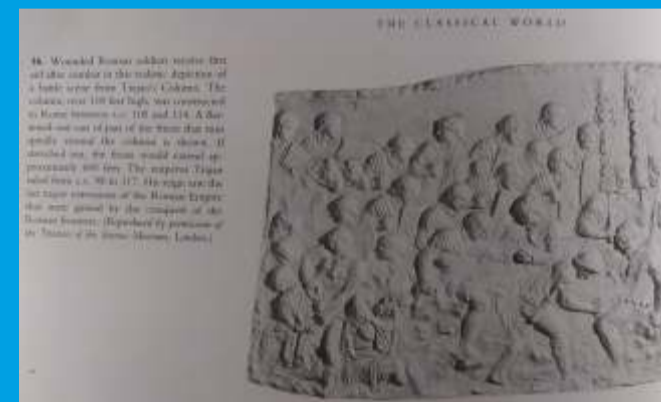
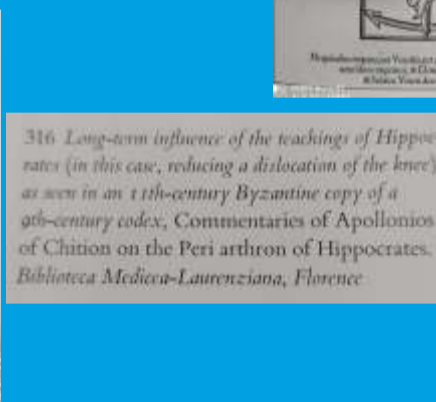
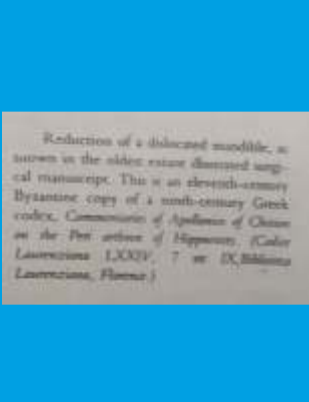
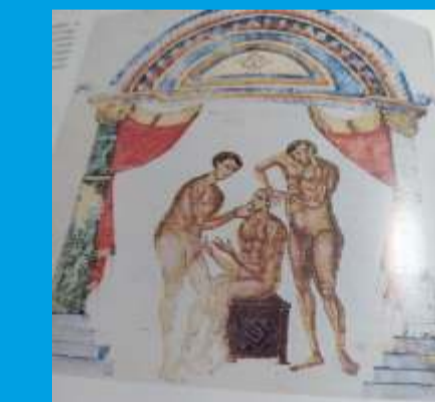
In Egypt, historical witnesses on account of physicians there are inscriptions of 2600 – 2400 B.C. Besides, the elder medical papyrus is Kahun's in 2000 – 1800 B.C. only for gynecological topics. Follows Smith's papyrus (17<sup>th</sup> c. B.C.), probably a copy of another papyrus of 3000 B.C. with surgical interesting. Then, there is Ebers' papyrus (16<sup>th</sup> c. B.C.), Hearst's papyrus (16<sup>th</sup> c. B.C.), London papyrus (14<sup>th</sup> c. B.C.), Brugs – Berlin (early 13<sup>th</sup> c. B.C.) and Chester Beatty (later 13<sup>th</sup> c. B.C.). All papyrus except the medical contents have religious and magic reports.



Greek medicine is coming, rational progressively, with written medical reports in Homer [Asclepius, Machaon, Podalirius (Iliad, II. 729 – 732), and Chiron Centaur (Iliad, 830 – 836)] (8<sup>th</sup> c. B.C.), in Herodotus [Democedes] (Persian Wars III. 125)] (5<sup>th</sup> c. B.C.) and follows the primitive scientific medicine initially with Alcmaeon's and Empedocles' reports in later writers, Hippocratic collection, Platon's and Aristotle's writings (5 – 3 c. B.C.). Follow Dioscurides, Soranus', Aretaeus' and Galen's books (1 – 2<sup>nd</sup> c. A.D.).



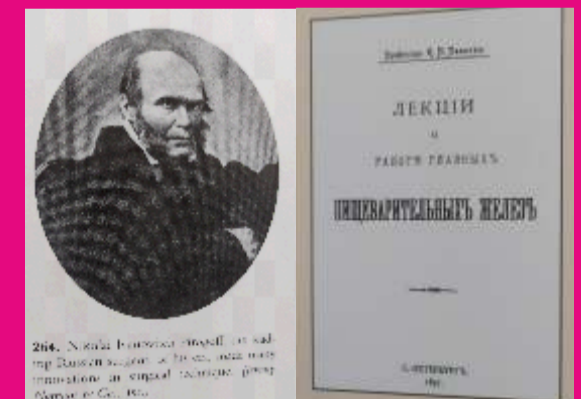
The march is continued with medical books in Greek language in Byzantine Empire with Orebasius, Aetius, Alexander of Tralles, Paul Aegineta (4<sup>th</sup> – 7<sup>th</sup> c. A.D.) and others, as Theophilus "Therapeutics", Meletius "On Nature", Leoni "Synopsis Medica" (7<sup>th</sup> – 9<sup>th</sup> c. A.D.) and many others until its conquest from Turks (15<sup>th</sup> c. A.D.).



In Middle Ages, in Latine speaking kingdons except various translations from Greek and Arabic medical writings, first is the writing "Bamberg Surgery" of Salernitan School (12<sup>th</sup> c. A.D.) and then follow medical writings in all over the western Europe.

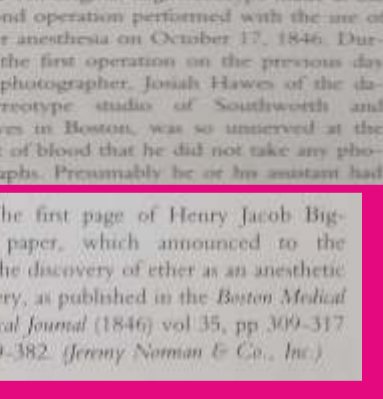
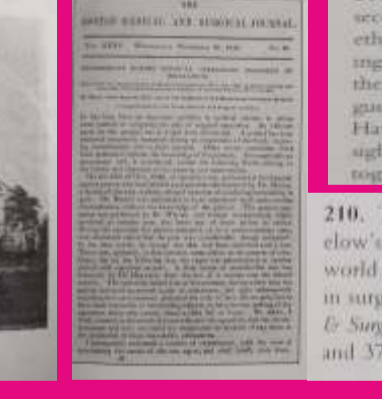
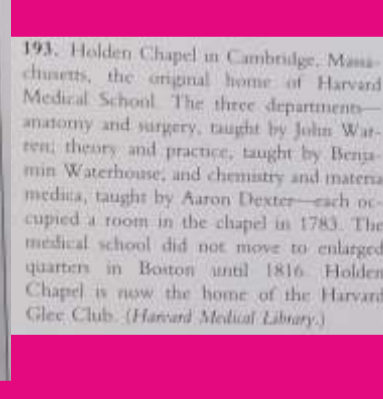


In Russia, representatives of Medicine

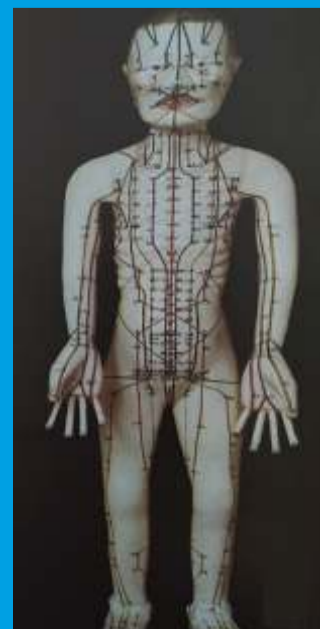


207. First edition of Pecher's classic work on the... The march is continued with medical books in Greek language in Byzantine Empire with Orebasius, Aetius, Alexander of Tralles, Paul Aegineta (4<sup>th</sup> – 7<sup>th</sup> c. A.D.) and others, as Theophilus "Therapeutics", Meletius "On Nature", Leoni "Synopsis Medica" (7<sup>th</sup> – 9<sup>th</sup> c. A.D.) and many others until its conquest from Turks (15<sup>th</sup> c. A.D.).

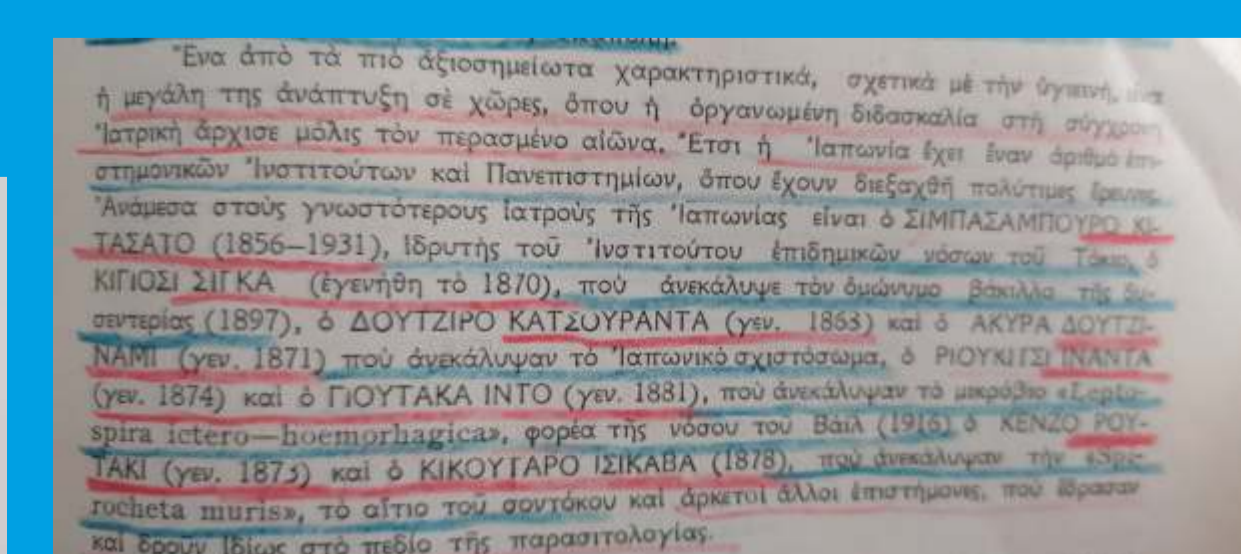
In America, mainly USA, the first medical treatise is the Zabdiel Boylston's treatise entitled "An Historical Account of the Small Pox Inoculated in New England, Upon All Sorts of Persons, Whites, Blacks, and of All Ages and Constitutions (1726); the first surgical work by J. Jones entitled " Jones's Plain Concise Practical Remarks on the Treatment of Wounds and Fractures (1775); the first medical thesis by J. R. Young entitled " An experimental inquiry into principles of nutrition and the digestive process" (Philadelphia 1803); the development of first medical schools is in the end of 18<sup>th</sup> c. CE, the first medical association in Boston (1735) and the first medical journal "Cases and Observations by the Medical Society of New – Haven Country", Connecticut 1784.



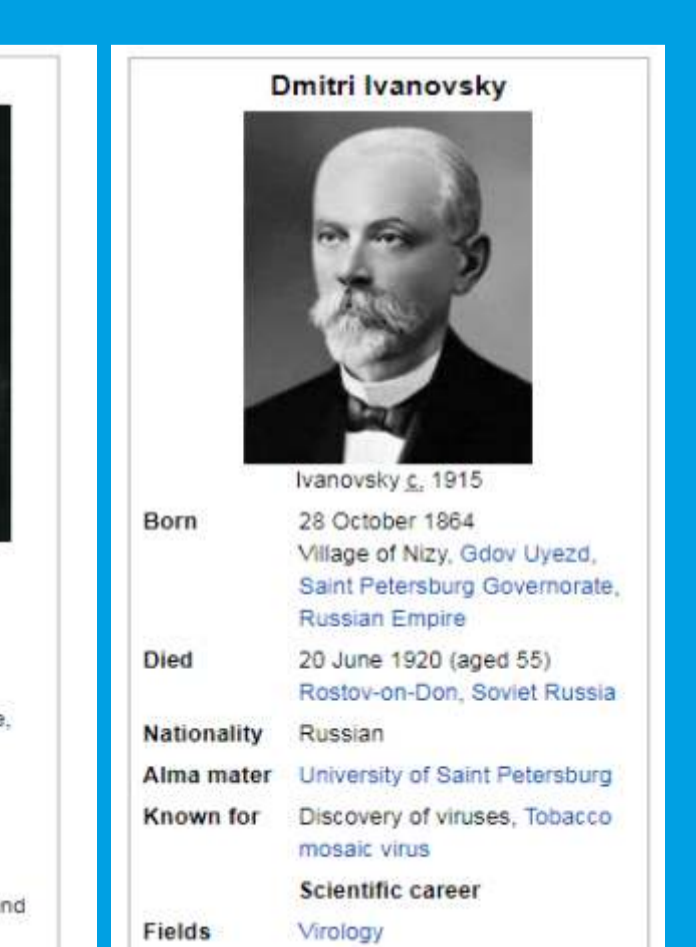
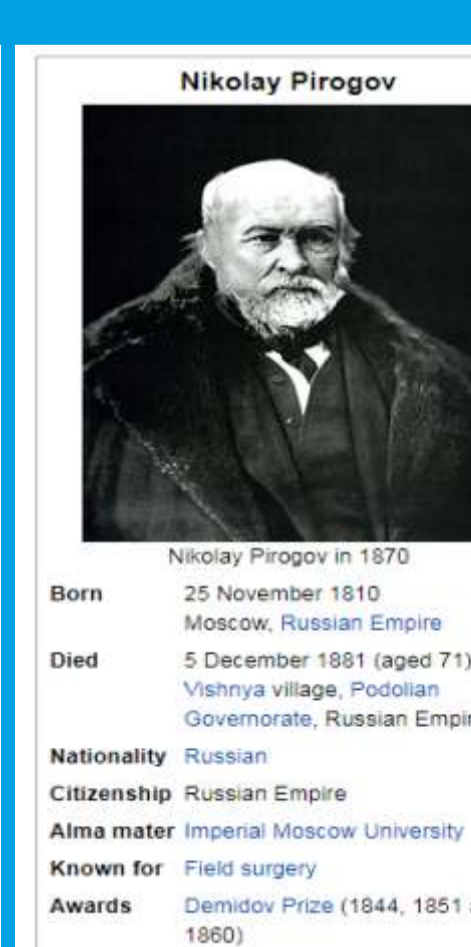
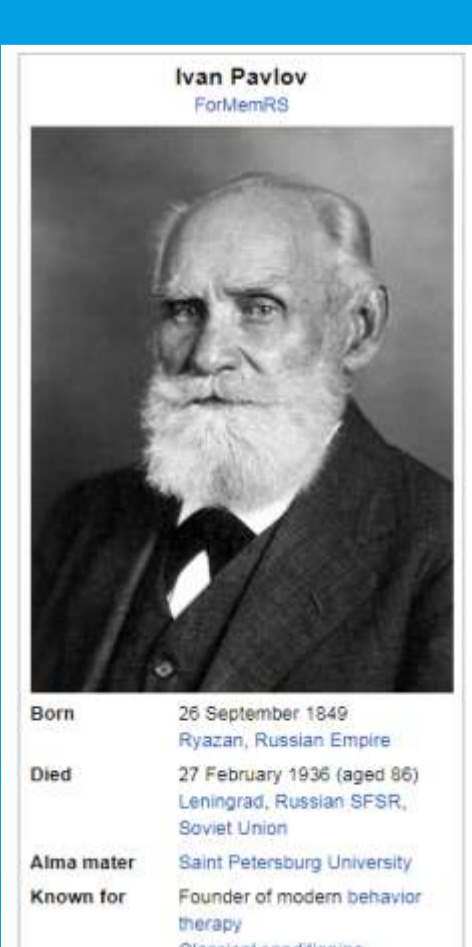
From Dutch and America the modern medicine is shifting in Japan mainly the 19<sup>th</sup> c. A.D. with the establishment Medical Schools and Medical Institutes with a great contribution to medical research and science.



228. Japanese paper-mache doll (c. 1880) used to demonstrate 660 treatment points in adaptation of Chinese acupuncture methodology. The Japanese also used these points in moxibustion, treatment by burning powdered mugwort on skin. Peabody Museum, Salem



In Russian Empire, there were pioneers physicians in 19<sup>th</sup> c. CE , as Ivan Pavlov (Physiology) , Nikolay Pirogov (Surgery), and Dmitri Ivanovski (Virology)



## CONCLUSION

Concluding, the course of medical science began from prehistoric period, from East to West and finished from West to East in 19<sup>th</sup> – 20<sup>th</sup> c. A.D., following the course of whole Science.